

L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS  
 AN 1991:584883 HCAPLUS  
 DN 115:184883  
 TI Laminated sheets for tube containers  
 IN Tsunoda, Hirotaka; Yamada, Kazuki  
 PA Dainippon Printing Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM B32B015-08  
 ICS B32B015-08; B32B027-36; B65D035-08  
 CC 38-3 (Plastics Fabrication and Uses)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03026541	A2	19910205	JP 1989-161328	19890624 <--
	JP 2794455	B2	19980903		
AB	Laminated sheets for tube containers for foods, medicines, dyes, etc., comprise (A) a surface layer of a low-cryst. polyester having glass-transition temp. (Tg) $\geq 40^\circ\text{C}$ , (B) a back layer of a low-cryst. polyester having Tg $\geq 40^\circ\text{C}$ , and (C) an intermediate layer comprising a dimensionally stable thermoplastic resin layer, a CO <sub>2</sub> H-contg. polyolefin layer, an Al foil layer, and another CO <sub>2</sub> H-contg. polyolefin layer. The dimensionally stable thermoplastic resin layer is located between the surface layer and the intermediate layer. Thus, an intermediate layer comprising a 12- $\mu\text{m}$ biaxially oriented polyester (E 5100) film, a polyurethane adhesive layer, a 100- $\mu\text{m}$ LDPE (Mirason 16P), a 30- $\mu\text{m}$ Nucrel AN-4213C layer, a 20- $\mu\text{m}$ Al foil layer, and a 50- $\mu\text{m}$ Nucrel N-0908C layer was extrusion coated on the polyester side to a thickness of 30 $\mu\text{m}$ with Shira PT (low-cryst. polyester) and on the other side to a thickness of 50 $\mu\text{m}$ with Shira PT to give a laminated sheet. Tube containers prepd. from this sheet showed good retention of flavor and suitability in squeezing.				
ST	oriented polyester laminate tube container; polyurethane adhesive laminate manuf; LDPE laminate tube container; polyolefin laminate tube container; aluminum foil laminate tube container; amorphous polyester laminate tube container				
IT	Polyesters, uses and miscellaneous				
	RL: USES (Uses)				
	(films, biaxially oriented, laminated sheets contg., for tube containers)				
IT	Alkenes, polymers				
	RL: USES (Uses)				
	(polymers, laminated sheets contg., for tube containers)				
IT	Containers				
	(tubes, amorphous polyester/thermoplastic resin/polyolefin/aluminum foil/polyolefin/amorphous polyester laminates for)				
IT	25038-59-9, E 5100, uses and miscellaneous				
	RL: USES (Uses)				
	(films, biaxially oriented, laminated sheets contg., for tube containers)				
IT	7429-90-5, Aluminum, uses and miscellaneous				
	RL: USES (Uses)				
	(foil, laminated sheets contg., for tube containers)				
IT	9002-88-4, Polyethylene 118232-52-3, Nucrel 0908C 136626-12-5, Nucrel AN 4213 136626-63-6, Sealer PT				
	RL: USES (Uses)				
	(laminated sheets contg., for tube containers)				

L5 ANSWER 1 OF 1 JAPIO COPYRIGHT 2001 JPO  
 AN 1991-026541 JAPIO  
 TI LAMINATED SHEET FOR TUBE CONTAINER AND TUBE CONTAINER USING SAME  
 IN TSUNODA HIROTAKA; YAMADA KAZUKI  
 PA DAINIPPON PRINTING CO LTD, JP (CO 000289)  
 PI JP 03026541 A 19910205 Heisei  
 AI JP1989-161328 (JP01161328 Heisei) 19890624  
 SO PATENT ABSTRACTS OF JAPAN, Unexamined Applications, Section: M, Sect. No. 1103, Vol. 15, No. 151, P. 110 (19910416)  
 IC ICM (5) B32B015-08  
 ICS (5) B32B015-08; (5) B32B027-36; (5) B65D035-08  
 AB PURPOSE: To enhance a fragrance-resistance characteristic and a vegetable oil holding characteristic by forming an intermediate layer composed of a laminate of thermoplastic synthetic resin layer/polyolefin resin layer/aluminum foil/polyolefinic resin layer between a surface layer and rear layer both of which are composed of a low-crystalline polyester resin.  
 CONSTITUTION: A thermoplastic synthetic resin layer 4 is formed from a biaxially stretched polyester film 2 to which a printing layer (m) is applied, a polyurethane adhesive layer and a low density polyethylene resin layer 3. Subsequently, a polyolefinic resin layer 6 is laminated between the surface of the low density polyethylene resin layer 3 and an aluminum foil 5 and a polyolefinic resin layer 7 is applied to the surface of the aluminum foil 5 to form an intermediate layer 8. Next, a surface layer 9 of a low-crystalline polyester resin having glass transition temp. of 40.degree.C or more is extruded to be laminated to the surface of the biaxially stretched polyester film 2 of the intermediate layer 8 and a rear layer 10 of a low-crystalline polyester resin having glass transition temp. of 40.degree.C or more is extruded to be formed on the surface of the polyolefinic resin layer 7.

L4 ANSWER 1 OF 1 WPINDEX COPYRIGHT 2001 DERWENT INFORMATION LTD  
 AN 1991-078438 [11] WPINDEX  
 DNN N1991-060601 DNC C1991-033438  
 TI Laminated sheet for tube container of medicine, etc. - comprises surface and back surface-layers of low crystalline polyester resin and thermoplastic resin inter-layer.  
 DC A17 A23 A92 B07 P73 Q32  
 PA (NIPQ) DAINIPPON PRINTING CO LTD  
 CYC 1  
 PI JP 03026541 A 19910205 (199111)\* 11p <--  
 JP 2794455 B2 19980903 (199840) 8p B32B015-08 <--  
 ADT JP 03026541 A JP 1989-161328 19890624; JP 2794455 B2 JP 1989-161328 19890624  
 FDT JP 2794455 B2 Previous Publ. JP 03026541  
 PRAI JP 1989-161328 19890624  
 IC B32B015-08; B32B027-36; B65D035-08  
 ICM B32B015-08  
 ICS B32B027-36; B65D035-08  
 AB JP 03026541 A UPAB: 19930928  
 Sheet comprises surface layer of low crystalline polyester resin with 40 deg. C or higher glass transition pt, back surface layer of low crystalline polyester resin layer with 40 deg.C or higher glass transition pt. and interlayer. Interlayer is laminate of thermoplastic resin layer with dimensional stability, polyolefin resin layer with carboxyl gps, Al foil and polyolefin resin layer with carboxylgps. Dimensionally stable thermoplastic resin layer is stuck to surface layer.  
 USE/ADVANTAGE - Used as tube containers for foods e.g. orange juice, lemon essence, and medicines contg. terpene perfume or vegetable oil, pastes e.g. shoe paste, hair dye, (contg. dye) and tooth paste. It has perfume resistance and vegetable oil keeping ability. Body and sealed bottom of tubes are easily formed and adhered under 120-160 deg.C, without exposure of interlayer. It is soft and is free of interlamine peeling.  
 @(11pp Dwg.No.0/3)  
 FS CPI GMPI  
 FA AB; DCN  
 MC CPI: A05-E01D3; A09-A01A; A10-E23; A12-P06C; A12-S07A; B04-C03D; B11-C06; B12-L02; B12-L03; B12-L05; B12-M06

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L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS  
AN 1971:421192 HCAPLUS  
DN 75:21192  
TI Homo- and copolymerization of vinylidene chloride using modified Ziegler-Natta catalysts. II. Synthesis and characterization of vinylidene chloride-ethylene copolymers  
AU Ulbricht, Joachim; Arnold, Manfred  
CS Sekt. Hochpoly., Tech. Hochsch. Chem. "Carl Schorlemmer" Leuna-Merseburg, Leuna-Merseburg, Ger.  
SO Plaste Kaut. (1971), 18(4), 250-4  
CODEN: PLKAAM  
DT Journal  
LA German  
CC 35 (Synthetic High Polymers)  
AB The copolymn. of ethylene and vinylidene chloride at .gtoreq.25 atm. in the presence of a catalyst mixt. of  $\text{TiCl}_4$ - $\text{Et}_2\text{AlOEt}$ -donor mixt. was studied as the monomer compn., Al/Ti ratio, and donor/ $\text{TiCl}_4$  ratio were varied. These 3 factors influence the overall polymn. speed and the polymer compn. obtained. Solvent extn., NMR and ir spectroscopy, and differential thermal anal. showed that the statistical copolymers and block copolymers prepd. depended on the Al/Ti ratio.  
ST Ziegler Natta catalysts; ethylene vinylidene chloride copolymer  
IT Polymerization catalysts  
(ethoxydiethylaluminum-titanium chloride, for chloroethylene with ethylene)  
IT 26655-22-1P, preparation  
RL: PREP (Preparation)  
(catalysts for)  
IT 7550-45-0, uses and miscellaneous  
RL: CAT (Catalyst use); USES (Uses)  
(catalysts, contg. ethoxydiethylaluminum, for polymn. of chloroethylene with ethylene)  
IT 1586-92-1  
RL: CAT (Catalyst use); USES (Uses)  
(catalysts, contg. titanium chloride, for polymn. of chloroethylene with ethylene)

L15 ANSWER 4 OF 9 CAPLUS COPYRIGHT 1996 ACS

AN 1983:522989 CAPLUS

DN 99:122989

TI Some recent studies on catalyst activity in vanadium-based  
\*\*\*Ziegler\*\*\* -Natta catalysts

AU Ahadian, Farhad; Khalaf, Shukri; Tait, Peter J. T.

CS Dep. Chem., UMIST, Manchester, UK

SO Proc. IUPAC, I. U. P. A. C., Macromol. Symp., 28th (1982), 256

Publisher: Int. Union Pure Appl. Chem., Oxford, UK.

CODEN: 50DXAF

DT Conference

LA English

AB The polymn. kinetics and the characteristics of active centers are examd. for the polymn. of  $H_2C:CCl_2$  [ \*\*\*75-35-4\*\*\* ] with a homogeneous catalyst comprising  $VOCl_2$ , THF [109-99-9], and iso-Bu<sub>3</sub>Al [100-99-2] or Et<sub>2</sub>AlCl [96-10-6] in toluene at 30.degree. or with a supported catalyst comprising  $VOCl_3$  and trialkylaluminum on SiO<sub>2</sub>. With the homogeneous catalyst, the concn. of active centers is low, and the polymn. rate is highest initially and decreases for .apprx.2 h to give a nearly const. value. With the supported catalyst, the polymn. rate is highest initially and decreases (more rapidly than with the homogeneous catalyst) to a const. value. The concn. of active centers/mol V increases with decrease of the V loading of the supported catalyst from 7.1% to 0.9%.